



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/516,135 | 03/01/2000 | SHAOWEI PAN | CE08144R | 3917 |

22917 7590 06/17/2005

MOTOROLA, INC.
1303 EAST ALGONQUIN ROAD
IL01/3RD
SCHAUMBURG, IL 60196

| |
|----------|
| EXAMINER |
|----------|

GESESSE, TILAHUN

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2684

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/516,135

Applicant(s)

PAN ET AL.

Examiner

Tilahun B Gesesse

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1- through 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ibanez-Meier et al (US patent no. 6,144,654) "Meier" in view of Chinitz et al (US patent No. 5,914,958).

Regarding claims 1-3, Meier teaches a method for transmission a wireless communication system, (column 2, line 20-column 4, lines 40)

Meier discloses determining a subset of the plurality of remote units (column 5, lines 35-65), wherein the subset is determined based on transmission of each remote from the plurality of remote units (column 5, line 35-65) uplink transmissions of the plurality of uplink transmissions that are associated with the subset to produce a combined signal (see abstract) and transmitting the combined signal to a base station to be broadcast via a downlink communication signal to the plurality of remote units (column 5, line 20-45 and figure 6).

Meier does not teach based on energy of uplink signals. However, Chinitz teaches base station 52, receives uplink signals from groups assigns full rate channel to subgroup D, as shown in figure 5. the solid line of group D is higher in energy than dotted inbound links. It would have been obvious to an artisan of ordinary skill in the art

Art Unit: 2684

at the time the invention was made to regroup based on energy of uplink signal, as evidenced by Chinitz, for communicating with group with higher energy.

Regarding claims 4-5 Meier discloses step of combining the uplink decoding uplink transmissions for the subset to produce a plurality of decoded transmissions; summing the plurality of decoded transmissions to produce a summed decoded transmission; and encoding the summed decoded transmission (see abstract).

Regarding claims 6-8. Meier teaches a method for transmission a wireless communication system, (column 2, line 20-column 4, lines 40)

Meier discloses determining a subset of the plurality of remote units (column 5, lines 35-65), wherein the subset is determined based on transmission of each remote from the plurality of remote units (column 5, line 35-65) uplink transmissions of the plurality of uplink transmissions that are associated with the subset to produce a combined signal (see abstract) and transmitting the combined signal to a base station to be broadcast via a downlink communication signal to the plurality of remote units (column 5, line 20-45 and figure 6).

Meier does not teach based on energy of uplink signals. However, Chinitz teaches base station 52, receives uplink signals from groups assigns full rate channel to subgroup D, as shown in figure 5. the solid line of group D is higher in energy than dotted inbound links. It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to regroup based on energy of uplink signal, as evidenced by Chinitz, for communicating with group with higher energy.

Regarding claims 9-11, Meier discloses an apparatus (see figures 1-7) comprising:

Meier teaches a method for transmission a wireless communication system, (column 2, line 20-column 4, lines 40)

Meier discloses determining a subset of the plurality of remote units (column 5, lines 35-65), wherein the subset is determined based on transmission of each remote from the plurality of remote units (column 5, line 35-65) uplink transmissions of the plurality of uplink transmissions that are associated with the subset to produce a combined signal (see abstract) and transmitting the combined signal to a base station to be broadcast via a downlink communication signal to the plurality of remote units (column 5, line 20-45 and figure 6).

Meier does not teach based on energy of uplink signals. However, Chinitz teaches base station 52, receives uplink signals from groups assigns full rate channel to subgroup D, as shown in figure 5. the solid line of group D is higher in energy than dotted inbound links. It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to regroup based on energy of uplink signal, as evidenced by Chinitz, for communicating with group with higher energy.

Regarding claim 12-15, Meier teaches a method for transmission a wireless communication system, (column 2, line 20-column 4, lines 40)

Meier discloses determining a subset of the plurality of remote units (column 5, lines 35-65), wherein the subset is determined based on transmission of each remote

Art Unit: 2684

from the plurality of remote units (column 5, line 35-65) uplink transmissions of the plurality of uplink transmissions that are associated with the subset to produce a combined signal (see abstract) and transmitting the combined signal to a base station to be broadcast via a downlink communication signal to the plurality of remote units (column 5, line 20-45 and figure 6).

Meier does not teach based on energy of uplink signals. However, Chinitz teaches base station 52, receives uplink signals from groups assigns full rate channel to subgroup D, as shown in figure 5. the solid line of group D is higher in energy than dotted inbound links. It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to regroup based on energy of uplink signal, as evidenced by Chinitz, for communicating with group with higher energy.

Response to Arguments

3. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tilahun B Gesesse whose telephone number is 571-272-7879. The examiner can normally be reached on flex.

Art Unit: 2684

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tilahun Gesesse 6/6/05
TILAHUN GESESSE
PRIMARY EXAMINER